



## Rechargeable Sealed Lead-Acid Battery

### PS-12800



Power-Sonic rechargeable batteries are lead-lead dioxide systems. The dilute sulphuric acid electrolyte is suspended and thus immobilized. Should the battery be accidentally overcharged producing hydrogen and oxygen, special one-way valves allow the gases to escape thus avoiding excessive pressure build-up. Otherwise, the battery is completely sealed and is, therefore, maintenance-free and leak proof.

PS-12800 is air transport approved, and meets all current requirements set forth by the C.A.B., F.A.A., I.A.T.A. and D.O.T.

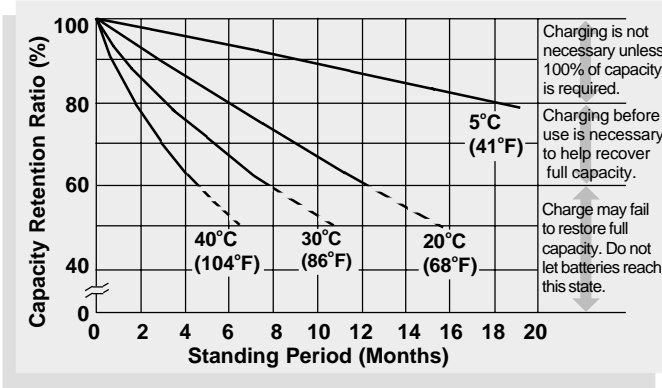
U.L. recognizes model PS-12800 under file number MH 14328.



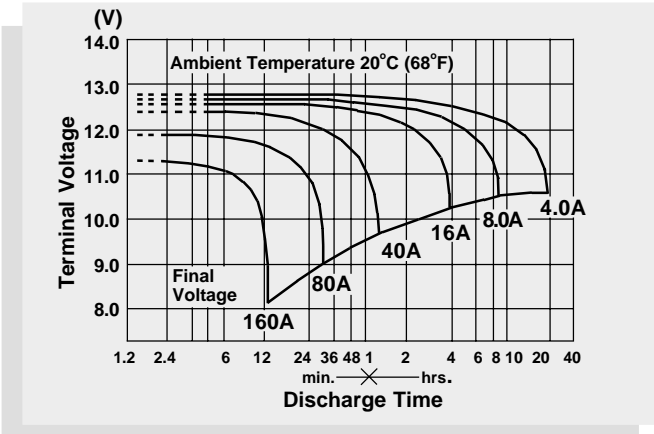
#### PERFORMANCE SPECIFICATIONS

|  |  |
|--|--|
| Nominal Voltage.....   | 12 volts (6 cells in series)                   |
| <b>Nominal Capacity</b>  |  |
| 20 hour rate (4.00A to 10.50 volts) .....                                      | 80.0 A.H.                                      |
| 10 hour rate (7.25A to 10.50 volts) .....                                      | 72.5 A.H.                                      |
| 5 hour rate (13.00A to 10.20 volts) .....                                      | 65.0 A.H.                                      |
| 1 hour rate (47.00A to 09.00 volts) .....                                      | 47.0 A.H.                                      |
| <b>Approximate Weight</b> .....  | 62.4 pounds (28.4 kg)                          |
| <b>Energy Density (20 hour rate)</b> .....                                     | 1.48 Watt-hours/cubic inch (90.1 Watt-hours/l) |
| <b>Specific Energy (20 hour rate)</b> .....                                    | 15.4 Watt-hours/pound (33.8 Watt-hours/kg)     |
| <b>Internal Resistance (Fully Charged Battery)</b> .....                       | 6 milliohms (approximately)                    |
| <b>Maximum Discharge Current ( ≤ 7 Min.)</b> .....                             | 240 amperes                                    |
| <b>Maximum Short-Duration Discharge Current ( ≤ 10 Sec.)</b> .....             | 800 amperes                                    |
| <b>Terminals</b> .....   | Heavy duty posts for nut & bolt terminals      |
| <b>Vibration Test (2000 cycles/minute, 0.10 inch excursion, 2 hours)</b> ..... | No loss in capacity or performance             |
| <b>Shelf Life — % of nominal capacity at 68° F (20° C)</b>                     |  |
| 1 Month.....   | 97%  |
| 3 Months.....  | 91%  |
| 6 Months.....  | 83%  |
| <b>Operating Temperature Range</b>   |  |
| <b>Charge</b> .....  | -4°F (-20°C) to 122°F (50°C)                   |
| <b>Discharge</b> .....   | -4°F (-20°C) to 140°F (50°C)                   |
| <b>Case</b> .....  | Polypropylene                                  |

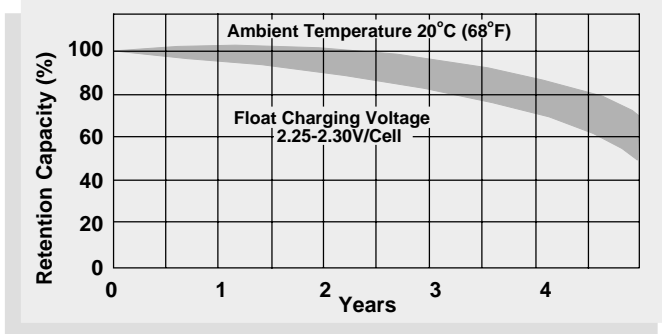
**Shelf Life and Storage**



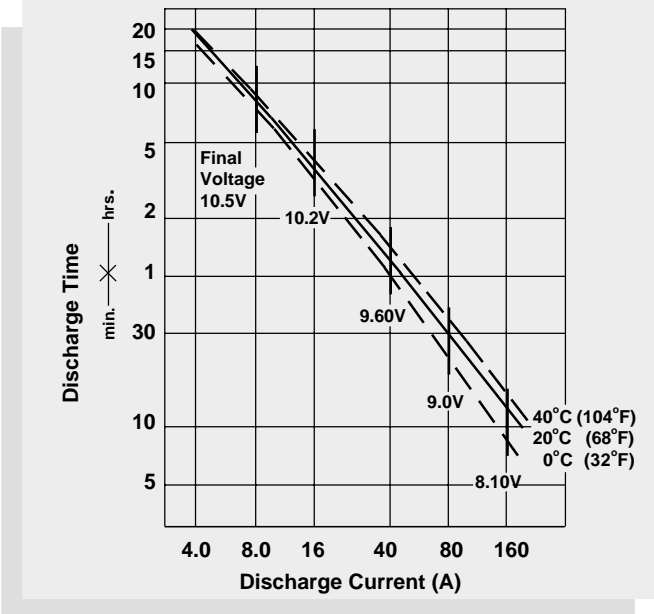
**Discharge Characteristics**



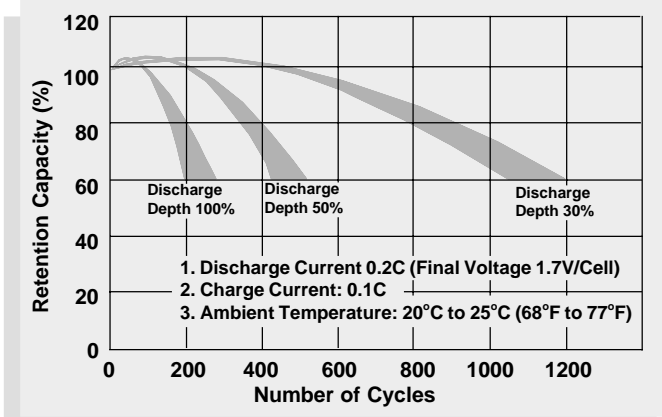
**Life Characteristics in Stand-By Use**



**Discharge Time vs. Discharge Current**



**Life Characteristics in Cyclic Use**



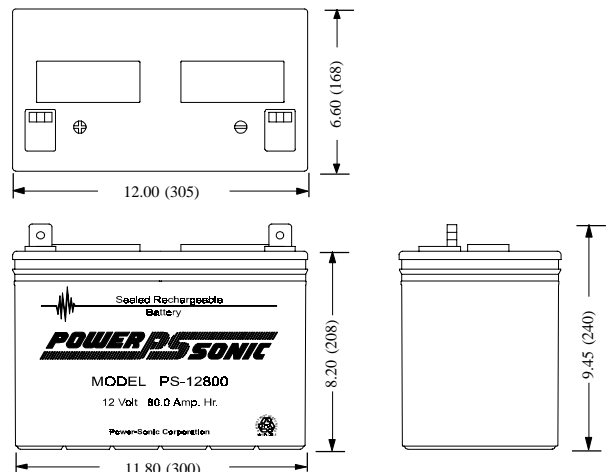
**CHARGING**

**Cycle Applications:** Limit initial current to 16A. Charge until battery voltage (under charge) reaches 14.40 to 14.70 volts at 68°F (20°C). Hold at 14.40 to 14.70 volts until current drops to approximately 800mA. Battery is fully charged under these conditions, and charger should either be disconnected or switched to "float" voltage.

**"Float" or "Stand-By" Service:** Hold battery across constant voltage source of 13.50 to 13.80 volts continuously. When held at this voltage, the battery will seek its own current level and maintain itself in a fully charged condition.

**NOTE:** Due to the self-discharge characteristics of this type of battery, it is imperative that they be charged after 6-9 months of storage, otherwise permanent loss of capacity might occur as a result of sulfation.

Physical Dimensions: in. (mm)



Tolerances are +/- 0.04 in. (+/- 1mm) and +/- 0.08 in. (+/- 2mm) for height dimensions.



**SALES & MARKETING**  
 3106 Spring Street  
 Redwood City, CA 94063 USA  
 Tel: 650-364-5001 Fax: 650-366-3662  
 rwcsales@power-sonic.com

www.power-sonic.com

**CUSTOMER SERVICE**  
 9163 Siempre Viva Road  
 San Diego, CA 92173 USA  
 Tel: 619-661-2030 Fax: 619-661-8033  
 battery@power-sonic.com